

Express Mail Label No. EV 325 822 495 US

Attorney Docket No. 54099-8003.US01

Amendments to the Claims:

1

1. (Currently amended) A human cell composition for use in producing one or more cytokines, comprising:

a human cell line characterized by expression of the transformed with a first expression vector comprising a coding sequence for an anti-apoptotic protein and a level of cytokine production that is at least 2(X) the level of cytokine production exhibited by the corresponding parental cell-line that does not express the coding sequence for the anti-apoptotic protein operably linked to a first promoter, and a second expression vector comprising the coding sequence for PKR operably linked to a second promoter, said cell line being characterized by a level of interferonalpha production that is significantly greater than the level of a control cell line transformed with PKR alone when the transformed cell line and the control line are grown under cell culture conditions of interferon-alpha production induced by the addition of Sendai virus.

- 2.
- 2. (Originally presented) The cell line composition according to claim 1, wherein said anti-apoptotic protein is CrmA.

3.

3. (Currently amended) A human cell line for use in producing one or more cytokines, prepared by the process comprising:

obtaining a parental human cell line capable of producing one or more cytokines;

modifying the cells by introducing an <u>a first</u> expression vector comprising the coding sequence for CrmA operably linked to a first promoter, and additional control elements necessary for expression in human cells, into the cells of said cell line; <u>a</u> second expression vector comprising the coding sequence for PKR operably linked to a second promoter, wherein said introduction of said first expression vector to said cells is prior, at the same time, or after said introduction of said second expression vector to said cells; and

screening and selecting for CrmA-expressing cells; and

treating said CrmA-expressing cells in a manner effective to result in enhanced cytokine production, wherein said modified and treated cell line is characterized by a level of cytokine production that is at least two times (2X) the level of cytokine production by the corresponding not modified parental cell line interferon-alpha production that is significantly greater than the level of a control cell line transformed with PKR alone when the transformed cell line and control cell line are grown under cell culture conditions of interferon-alpha production induced by the addition of Sendai virus.

Claims 4-5 (Canceled)

6. (Currently amended) The human cell line according to claim 5 41, wherein the process further comprises:

treating said CrmaA and PKR overexpressing cells of said human cell line in a manner effective to result in enhanced cytokine production, wherein said modified and treated cell line is characterized by a level of cytokine production that is at least two times (2X) the level of cytokine production by the corresponding not-modified unmodified parental cell.

- 7. (Currently Amended) The human cell line according to claim , wherein treating means subjecting said modified cells said human cell line to one or both of priming and inducing.
- 8. (Currently Amended) The human cell line according to claim, wherein priming means exposing said modified cells human cell line to phorbol myristate acetate (PMA).

Claims 9-10 (Canceled)

11. (Currently Amended) The human cell line according to claim, wherein inducing means exposing said modified cells human cell line to at least one non-microbial inducing agent comprising poly(I):poly(C) (polyIC).

Claims 12-38 (Canceled)

Express Mail Label No. EV 325 822 495 US Attorney Docket No. 54099-8003.US01

- 39. (Currently amended) The human cell line according to claim 3, wherein said first expression vector further comprises a first selectable marker encoding nucleic acid sequence; and wherein said screening and selecting for Crm-A-expression cells mean culturing said modified cells in <u>a</u> medium containing a first selection agent to select for Crm-A-expressing cells.
- 40. (Currently amended) The human cell line according to claim 5 3, wherein said second expression vector further comprises a second selectable marker encoding nucleic acid sequence; and wherein said screening and selecting for PKR overexpressing cells mean culturing said modified cells in a medium containing a second selection agent to select for PKR overexpressing cells.
 - 41. (Newly presented) A human cell line for use in producing one or more cytokines, wherein the cell composition is prepared by a process comprising:

culturing, under conditions of cytokine induction, a human cell line transformed with a first expression vector comprising a coding sequence for an anti-apoptotic protein operably linked to a first promoter, and a second expression vector comprising the coding sequence for PKR operably linked to a second promoter, said cell line being characterized by a level of interferon-alpha production that is significantly greater than the level of a control cell line transformed with PKR alone when the transformed cell line and the control line are grown under cell culture conditions of interferon-alpha production induced by the addition of Sendai virus.